



SAFETY DATA SHEET ROBO ACID

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name	ROBO ACID
Product number	R101 EV
Internal identification	Livestock
UFI	UFI: 5NM-37G5-CE60-5W69

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses	Acid Cleaner for the Descaling of Robotic Milking Equipment.
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1.3. Details of the supplier of the safety data sheet

Supplier	UK Supplier:	EU Supplier:
	Evans Vanodine International plc Brierley Road, Walton Summit, Preston. UK. PR5 8AH Tel: 01772 322 200 e-mail: productcompliance@evansvanodine.co.uk	Evans Vanodine Europe 6-9 Trinity Street, Dublin 2. D02 EY47. Republic of Ireland.

1.4. Emergency telephone number

Emergency telephone	New Safety Data Sheets - 01772 322 200 - Mon to Thur. 8.30am to 4.30pm - Fri 8.30am to 1.30pm (Also available 24/7 from our website www.evansvanodine.co.uk) For Technical Advice about this SDS - 01772 318 818 - Mon to Thur 8.30am to 4.45pm - Fri 8.30am to 1.30pm
National emergency telephone number	For Health Care Professionals only - For use in UK: Contact the National Poisons Information Service for further advice. For use in the Republic of Ireland: To report a poisoning incident contact The National Poisons Information Centre, Beaumont Hospital, Dublin (01-8092166). For use in Malta: Emergency services (Ambulance, Fire and Rescue, Police) : 112

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (SI 2019 No. 720)

Physical hazards	Not Classified
Health hazards	Acute Tox. 4 - H302 Skin Corr. 1B - H314 Eye Dam. 1 - H318
Environmental hazards	Not Classified

2.2. Label elements

Hazard pictograms



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Signal word	Danger
Hazard statements	H302 Harmful if swallowed. H314 Causes severe skin burns and eye damage.
Precautionary statements	P102 Keep out of reach of children. P260 Do not breathe mist. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P270 Do not eat, drink or smoke when using this product. P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P315 Get immediate medical advice/ attention. P501 Dispose of contents/ container in accordance with local regulations.
Contains	PHOSPHORIC ACID

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB. Including - Endocrine disrupting properties: None known.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

PHOSPHORIC ACID	30-60%
CAS number: 7664-38-2	EC number: 231-633-2
Spec Conc Limits :- Skin Corr. 1B (H314) ≥ 25%, Skin Irrit. 2 (H315) >10% <25%, Eye Irrit. 2 (H319) >10%	
Classification	
Acute Tox. 4 - H302	
Skin Corr. 1B - H314	
Eye Dam. 1 - H318	

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation	Unlikely route of exposure as the product does not contain volatile substances. If spray/mist has been inhaled, proceed as follows. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing.
Ingestion	Do not induce vomiting. Rinse mouth thoroughly with water. Give plenty of water to drink. Get medical attention immediately.
Skin contact	Wash with plenty of water. Get medical attention promptly if symptoms occur after washing.
Eye contact	Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse. Get medical attention immediately.

4.2. Most important symptoms and effects, both acute and delayed

General information	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
Inhalation	Irritation of nose, throat and airway.

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Ingestion	May cause chemical burns in mouth and throat.
Skin contact	Burning pain and severe corrosive skin damage. May cause serious chemical burns to the skin.
Eye contact	Severe irritation, burning and tearing. Prolonged contact causes serious eye and tissue damage.

4.3. Indication of any immediate medical attention and special treatment needed

Notes for the doctor	Treat symptomatically.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	The product is not flammable. Use fire-extinguishing media suitable for the surrounding fire.
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5.2. Special hazards arising from the substance or mixture

Specific hazards	Thermal decomposition or combustion products may include the following substances: Irritating gases or vapours.
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5.3. Advice for firefighters

Special protective equipment for firefighters	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.
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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	Wear protective clothing, gloves, eye and face protection. For personal protection, see Section 8.
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6.2. Environmental precautions

Environmental precautions	Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.
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6.3. Methods and material for containment and cleaning up

Methods for cleaning up	Small Spillages: Flush away spillage with plenty of water. Large Spillages: Contain and absorb spillage with sand, earth or other non-combustible material. Collect and place in suitable waste disposal containers and seal securely.
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6.4. Reference to other sections

Reference to other sections	For personal protection, see Section 8.
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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions	Wear protective clothing, gloves, eye and face protection. DO NOT mix with other chemicals.
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7.2. Conditions for safe storage, including any incompatibilities

Storage precautions	Keep only in the original container in a cool, well-ventilated place. Store away from the following materials: Oxidising materials. (eg Hypochlorite / Bleach) & Alkalis.
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7.3. Specific end use(s)

Specific end use(s)	The identified uses for this product are detailed in Section 1.2.
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Usage description	See Product Information Sheet & Label for detailed use of this product.
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SECTION 8: Exposure controls/Personal protection

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8.1. Control parameters

Occupational exposure limits

PHOSPHORIC ACID

Long-term exposure limit (8-hour TWA): WEL 1 mg/m³

Short-term exposure limit (15-minute): WEL 2 mg/m³

WEL = Workplace Exposure Limit.

8.2. Exposure controls

Protective equipment



Appropriate engineering controls	Not applicable.
Eye/face protection	The following protection should be worn: Chemical splash goggles or face shield.
Hand protection	Wear protective gloves. (Household rubber gloves.)
Respiratory protection	Respiratory protection not required.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid.
Colour	Clear. Colourless.
Odour	Faint
pH	pH (concentrated solution): 0.15
Melting point	-4°C
Initial boiling point and range	105°C @ 760 mm Hg
Flash point	Boils without flashing.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	Not applicable.
Vapour pressure	Not available.
Vapour density	Not available.
Relative density	1.200 @ 20°C
Solubility(ies)	Soluble in water.
Partition coefficient	Not applicable.
Auto-ignition temperature	Not applicable.
Decomposition Temperature	Not applicable.
Viscosity	Not available.

9.2. Other information

Other information	None.
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Particle size Not applicable.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity Reacts with alkalis and generates heat.

10.2. Chemical stability

Stability No particular stability concerns.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions See sections 10.1,10.4 & 10.5

10.4. Conditions to avoid

Conditions to avoid There are no known conditions that are likely to result in a hazardous situation.

10.5. Incompatible materials

Materials to avoid Strong alkalis. Chlorine releasing materials will liberate toxic chlorine gas.

10.6. Hazardous decomposition products

Hazardous decomposition products No known hazardous decomposition products.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological effects We have not carried out any animal testing for this product. Any ATE figures quoted below are from Toxicity Classifications that have been carried out using ATE (Acute Toxicity Estimate) Calculation Method using LD50 or ATE figures provided by the Raw Material Manufacturer.

Acute toxicity - oral

Notes (oral LD₅₀) Classification criteria has been met – Product is classified as Harmful if Swallowed.

ATE oral (mg/kg) 1,666.67

Acute toxicity - dermal

Summary Not applicable.

Acute toxicity - inhalation

Summary Not applicable.

Skin corrosion/irritation

Skin corrosion/irritation Causes severe burns.

Serious eye damage/irritation

Serious eye damage/irritation Causes serious eye damage.

Respiratory sensitisation

Summary Not applicable.

Skin sensitisation

Summary Not applicable.

Germ cell mutagenicity

Summary Not applicable.

Carcinogenicity

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Summary Not applicable.

Reproductive toxicity

Summary Not applicable.

Specific target organ toxicity - single exposure

Summary Not applicable.

Specific target organ toxicity - repeated exposure

Summary Not applicable.

Aspiration hazard

Summary Not applicable.

11.2 Information on other Hazards 11.2.1 Endocrine disrupting properties None known.

SECTION 12: Ecological information

Ecotoxicity The product may affect the acidity (pH) of water which may have hazardous effects on aquatic organisms.

12.1. Toxicity

Toxicity We have not carried out any Aquatic testing, therefore we have no Aquatic Toxicity Data specifically for this product. The Aquatic Toxicity Data, where provided by the raw material manufacturer for ingredients with aquatic toxicity, can be made available on request.

12.2. Persistence and degradability

Persistence and degradability This product, at use dilutions, is readily broken down in biological effluent treatment plants.

12.3. Bioaccumulative potential

Bioaccumulative potential The product does not contain any substances expected to be bioaccumulating.

Partition coefficient Not applicable.

12.4. Mobility in soil

Mobility Not known.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

12.6 Endocrine disrupting properties None known.

12.6. Other adverse effects

Other adverse effects Now section 12.7: None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal methods Discharge used solutions to drain. Small amounts (less than 5 Litres) of unwanted product may be flushed with water to sewer. Larger volumes must be sent for disposal as special waste. Rinse out empty container with water and consign to normal waste.

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SECTION 14: Transport information

14.1. UN number

UN No. (ADR/RID)	3264
UN No. (IMDG)	3264
UN No. (ICAO)	3264

14.2. UN proper shipping name

Proper shipping name (ADR/RID)	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (phosphoric acid solution)
Proper shipping name (IMDG)	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (phosphoric acid solution)
Proper shipping name (ICAO)	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (phosphoric acid solution)

14.3. Transport hazard class(es)

ADR/RID class	Class 8 : Corrosive Substances.
ADR/RID label	8
IMDG class	Class 8 : Corrosive Substances.
ICAO class/division	Class 8 : Corrosive Substances.

Transport labels



14.4. Packing group

ADR/RID packing group	II
IMDG packing group	II
ICAO packing group	II

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant
No.

14.6. Special precautions for user

EmS	F-A, S-B
Tunnel restriction code	(E)

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not relevant. for a packaged product.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

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EU legislation

Safety Data Sheet prepared in accordance with EU Regulation: "REACH Commission Regulation (EU) No 2020/878 (which amends Regulation (EC) No 2015/830, 453/2010 & 1907/2006)." and UK Regulation: "SI 2020 No. 1577 - The REACH etc. (Amendment etc.) (EU Exit) Regulations 2020".

The product is as classified under - EU GHS: CLP - "Regulation (EC) No 1272/2008 classification, labelling & packaging of substances & mixtures." and UK GHS: "SI 2020 No. 1567 - The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use) (Amendment etc.) (EU Exit) Regulations 2020".

Ingredients are listed with classification under - EU GHS: CLP - "Regulation (EC) No 1272/2008 classification, labelling & packaging of substances & mixtures." and UK GHS: "SI 2020 No. 1567 - The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use) (Amendment etc.) (EU Exit) Regulations 2020".

15.2. Chemical safety assessment

No chemical safety assessment has been carried out as not applicable as this product is a mixture.

SECTION 16: Other information

Abbreviations and acronyms used in the safety data sheet

PBT: Persistent, Bioaccumulative and Toxic substance.
 vPvB: Very Persistent and Very Bioaccumulative.
 ATE: Acute Toxicity Estimate.
 ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
 IMDG: International Maritime Dangerous Goods.
 ICAO: Technical Instructions for the Safe Transport of Dangerous Goods by Air.
 REACH: The REACH etc. (Amendment etc.) (EU Exit) Regulations 2020 No. 1577.
 GHS: Globally Harmonized System.
 Spec Conc Limits = Specific Concentration Limits.

Classification abbreviations and acronyms

Eye Dam. = Serious eye damage
 Eye Irrit. = Eye irritation
 Skin Corr. = Skin corrosion
 Skin Irrit. = Skin irritation

Key literature references and sources for data

Material Safety Data Sheet, Miscellaneous manufacturers. CLP Class - Table 3.1 List of harmonised classification and labelling of hazardous substances. ECHA - C&L Inventory database.

Classification procedures according to SI 2019 No. 720

Calculation Method.

Revision comments

New Format Safety Data Sheet prepared in accordance with REACH Commission Regulation (EU) No 2020/878 (which amends Regulation (EC) No 453/2010 & 1907/2006). - No change in Product Classification. (Changes made to sections 2,3,9,11,12,15+16)

Revision date

10/12/2022

Revision

2

SDS status

The Hazard Statements listed below in this Section No 16 relate to the Raw Materials (Ingredients) in the Product (as listed in Section 3) and NOT the product itself. For the Hazard Statements relating to this Product see Section 2.

Hazard statements in full

H302 Harmful if swallowed.
 H314 Causes severe skin burns and eye damage.
 H318 Causes serious eye damage.